



DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132-5190

5090
Ser 06CH.RM/474
June 23, 2000

Ms. Sheryl Lauth, (SFD 8-1)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Mr. Chein Kao
Department of Toxic Substances Control
700 Heinz Avenue, Suite 200
Berkeley, CA 94710

Mr. Brad Job
California Regional Quality Control Board, San Francisco Bay Region
1515 Clay Street, #1400
Oakland, CA 94612

Dear BCT members:

Enclosure (1) is provided for your review regarding the Parcel C soil remediation areas, Hunters Point Shipyard. This information will be discussed further with the BCT and City on June 29, 2000 starting at 1:00 p.m. in the Tetra Tech EM Inc. main conference room.

Should you have any concerns with this matter, please contact the undersigned at (619) 532-0913.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard G. Mach Jr.", written over the word "Sincerely,".

RICHARD G. MACH JR., P.E.
BRAC Environmental Coordinator
By direction of the Commander

Enclosure: (1) Soil Remediation Areas, Parcel C, Hunters Point Shipyard, June 23, 2000

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Copy to:
Ms. Amy Brownell
1390 Market St., Suite 910
San Francisco, Ca 94102-4682

Mr. John Chester
1155 Market Street, 4th Floor
San Francisco, CA 94103

**TABLE 1
SOIL REMEDIATION AREAS
PARCEL C, HUNTERS POINT SHIPYARD**

IR Site Number	Remediation or De Minimis Area	City's Land Use Plan^a	Chemicals of Concern^b	Previous Agency Recommendations^c	Proposed for Discussion^d	Navy Recommendations/Rationale
IR-25	25-1	Residential	PCBs, PAHs	EPA, DTSC, City: Action	Yes	Navy concurs with agency recommendations in these areas; however, the Navy wishes to discuss the area since (1) shallow soil contamination is co-located with proposed soil and groundwater treatability studies, and (2) Building 134 is being considered for reuse.
	25-3	Residential	PCE, Pesticides	EPA, DTSC, City: Action	Yes	
	DM B3924	Residential	PCBs	EPA, DTSC, City: Action	Yes	
	25-2	Residential	PCBs, PAHs, Metals	EPA, DTSC, City: Action	Yes	Navy concurs with agency recommendations in this area; however, the Navy wishes to discuss the area since Building 134 is being considered for reuse.
	DM B3822	Residential	PCBs	EPA, DTSC, City: No further action, pending results of Parcel B confirmation sampling	No	Navy concurs with recommendation--area is being remediated to residential standards under the Parcel B Remedial Action.
	DM B3926	Residential	Metals	EPA: No further action DTSC, City: Action	No	Navy concurs with DTSC and City recommendation; however, the Navy may review the correlation between manganese concentrations and occurrence of chert
	DM B4126	Residential	Metals	EPA, City: No further action DTSC: Action pending Cr/CrVI & Ni info	No	Navy concurs with EPA and City recommendation (based on nickel concentration consistent with ambient conditions); however, further evaluation of chromium concentrations may be required
IR-27	DM 9307	Industrial	PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
IR-28	28-1	Industrial	PAHs, Metals	EPA, DTSC: Action for 28-1 soil located outside building 231; ICs for maintaining integrity of building floor or restrict excavation below building City: Action for 28-1 soil below and outside of building 231	Yes	Navy concurs with EPA and DTSC recommendation and wishes to discuss City's recommendation

TABLE 1 (CONTINUED)
SOIL REMEDIATION AREAS
PARCEL C, HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

IR Site Number	Remediation or De Minimis Area	City's Land Use Plan ^a	Chemicals of Concern ^b	Previous Agency Recommendations ^c	Proposed for Discussion ^d	Navy Recommendations/Rationale
IR-28	28-2	Residential/Industrial	PCBs, PAHs	EPA, DTSC, City: Action for borings IR28B279 and IR28B280 (in Building 251) to 7 feet bgs	Yes	Navy concurs with agency recommendations; however, the Navy wishes to discuss area because (1) excavation location at the boundary of a educational/cultural use area, (2) shallow soil contamination is co-located with proposed soil and groundwater treatability studies, and (3) Building 251 is being considered for reuse
	28-4	Industrial	PCBs, PAHs, Metals	EPA: No further action DTSC, City: Action	Yes	Navy concurs with EPA recommendation and wishes to discuss DTSC and City recommendation since (1) excavation location in educational/cultural use area, and (2) Building 251 is being considered for reuse
	28-5	Industrial	Metals	EPA: No further action DTSC, City: Action	Yes	
	28-11	Industrial	PAHs, Metals, PCBs	EPA, DTSC, Navy: No further action City: Action for As and PAH hit	Yes	Navy concurs with EPA and DTSC recommendation and wishes to discuss City's recommendation. The Navy also notes that the area is located near proposed soil and groundwater treatability study location, and Building 231 is proposed for reuse.
	28-13	Residential	PAHs	EPA: No further action City, DTSC: Action	Yes	Navy concurs with EPA recommendation and wishes to discuss DTSC and City recommendation since excavation located in proposed future street and residential scenario may not be appropriate.
	28-17	Industrial	PCBs	EPA, City: No further action DTSC: Requests additional sampling	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since PCB concentrations are below industrial PRGs.
	28-18	Residential/Industrial	Metals	EPA, DTSC, City: Action for boring IR28MW309B	Yes	Navy concurs with agency recommendation for remediation; however, the Navy wishes to clarify the City's reuse in the area.

TABLE 1 (CONTINUED)
SOIL REMEDIATION AREAS
PARCEL C, HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

IR Site Number	Remediation or De Minimis Area	City's Land Use Plan^a	Chemicals of Concern^b	Previous Agency Recommendations^c	Proposed for Discussion^d	Navy Recommendations/Rationale
IR-28	28-21	Residential/ Industrial	Metals	EPA: No further action DTSC, City: Action and/or additional sampling	Yes	Navy concurs with EPA recommendation and wishes to discuss DTSC and City recommendation since the area is located at or near open space use boundary.
	DM 8334	Residential	Metals, PCBs	EPA, City: No further action DTSC: Action for residential	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since concentrations are either consistent with ambient conditions or at 1998 residential PRGs.
	DM 9420	Industrial	PAHs	EPA: No further action DTSC, City: Action	Yes	Navy concurs with EPA recommendation and wishes to discuss DTSC and City recommendation since concentrations are below 1998 industrial PRGs.
	DM 9434	Residential	Metals	EPA, City: No further action DTSC: Action for residential	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since concentrations are consistent with ambient conditions.
	DM 9532	Residential	PAHs, Metals, PCBs	EPA, City: No further action DTSC: Action	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since contaminants were removed under EE-09
	DM 9819	Industrial	PAHs	EPA, City: No further action DTSC: Further investigation for TCE	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since potential TCE contamination will be addressed by soil treatability study.
	DM51SS15	Residential	PCBs	EPA, City: Action for soil at PA51SS15 to 2 feet bgs DTSC: Disagrees on extent of remediation	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since area was identified based on BCT input during RMR meetings.

**TABLE 1 (CONTINUED)
SOIL REMEDIATION AREAS
PARCEL C, HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

IR Site Number	Remediation or De Minimis Area	City's Land Use Plan^a	Chemicals of Concern^b	Previous Agency Recommendations^c	Proposed for Discussion^d	Navy Recommendations/Rationale
IR-28	28-3	Residential	PAHs, Metals	EPA, DTSC, City: Action for boring IR28MW311A to 6 feet bgs	No	Navy concurs with agency recommendations; however, the Navy notes that area is located near proposed soil and groundwater treatability study location, and adjacent Building 281 is being considered for reuse.
	28-6	Residential	PCBs, PAHs, Metals	EPA: No further action DTSC: Action City: Review Mn hit	No	Navy concurs with City recommendation, and will review the correlation between manganese concentrations and occurrence of chert. However, the Navy notes that Building 258 is proposed for reuse.
	28-7	Residential	PAHs, Metals	EPA: No further action DTSC: Action City: Review Mn hit	No	Navy concurs with City recommendation, and will review the correlation between manganese concentrations and occurrence of chert. However, the Navy notes that the area is located near proposed soil and groundwater treatability study location.
	28-8	Residential	PAHs, Metals	EPA: No further action DTSC: Action City: Review Mn hit	No	
	28-9	Industrial	Metals, PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	28-10	Residential	Metals, PAHs	EPA: No further action DTSC: Action City: Action for/Review Mn hit	No	Navy concurs with City recommendation, and will review the correlation between manganese concentrations and occurrence of chert.
	28-12	Industrial	Metals, PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	28-14	Industrial	PAHs, Metals, PCBs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	28-15	Industrial	Metals, PCBs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	28-16	Industrial	PAHs, PCBs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.

TABLE 1 (CONTINUED)
SOIL REMEDIATION AREAS
PARCEL C, HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

IR Site Number	Remediation or De Minimis Area	City's Land Use Plan^a	Chemicals of Concern^b	Previous Agency Recommendations^c	Proposed for Discussion^d	Navy Recommendations/Rationale
IR-28	28-19	Industrial	Metals, PAHs	EPA: Additional characterization DTSC: Additional sampling or remediation. City: Action	No	The Navy concurs with EPA and DTSC recommendation and will collect additional characterization data; however, the Navy wishes to clarify that Building 211 is proposed for reuse.
	DM 10112	Industrial	PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	DM 10204	Industrial	PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	DM 10220	Industrial	Metals	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	DM 10329	Industrial	PCBs, PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	DM 9336	Residential	Metals	EPA: No further action DTSC: Action for residential City: Action for Mn hit	No	Navy concurs with DTSC and City recommendation; however, the Navy may review the correlation between manganese concentrations and occurrence of chert
	DM 9618	Industrial	PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	DM 9621	Industrial	PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	DM 9721	Industrial	PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	DM 9824	Industrial	PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	DM 9919	Industrial	PCBs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	DM 9921	Industrial	PCBs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.

TABLE 1 (CONTINUED)
SOIL REMEDIATION AREAS
PARCEL C, HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

IR Site Number	Remediation or De Minimis Area	City's Land Use Plan^a	Chemicals of Concern^b	Previous Agency Recommendations^c	Proposed for Discussion^d	Navy Recommendations/Rationale
IR-29	29-2	Residential	Metals	EPA: No further action DTSC, City: Action	Yes	Navy concurs with EPA recommendation and wishes to discuss DTSC and City recommendation since concentrations are considered consistent with ambient conditions.
	29-4	Residential	Metals, PAHs, PCBs	EPA: No further action DTSC, City: Action	Yes	Navy concurs with DTSC and City recommendation for remediation of PAHs and PCBs; however, the Navy wishes to discuss the area since arsenic concentrations are consistent with ambient concentrations and do not warrant remediation.
	29-1	Residential	PAHs, Metals, PCBs	EPA, DTSC, City: Action for soil on east side of building 203	No	Navy concurs with agency recommendation.
	29-3	Residential	PCBs	EPA, City: No further action DTSC: Action	No	Navy concurs with DTSC recommendation.
	29-6	Residential	PAH	EPA, DTSC, City: Action	No	Navy concurs with agency recommendation.
	29-7	Residential	Metals	EPA, City, Navy: Action for trench area PA49TA01 DTSC: Add IR49B016A for residential.	No	Navy concurs with agency recommendation.
	DM 8343	Residential	Arsenic	EPA, DTSC, City, Navy: No further action	No	Navy concurs with agency NFA recommendation.
	IR-30	30-1	Residential	Metals, PAHs, PCBs	EPA: No further action DTSC: Action City: Action for boring PA29B030	Yes

TABLE 1 (CONTINUED)
SOIL REMEDIATION AREAS
PARCEL C, HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

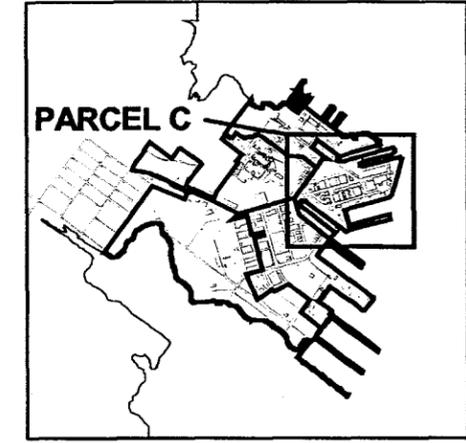
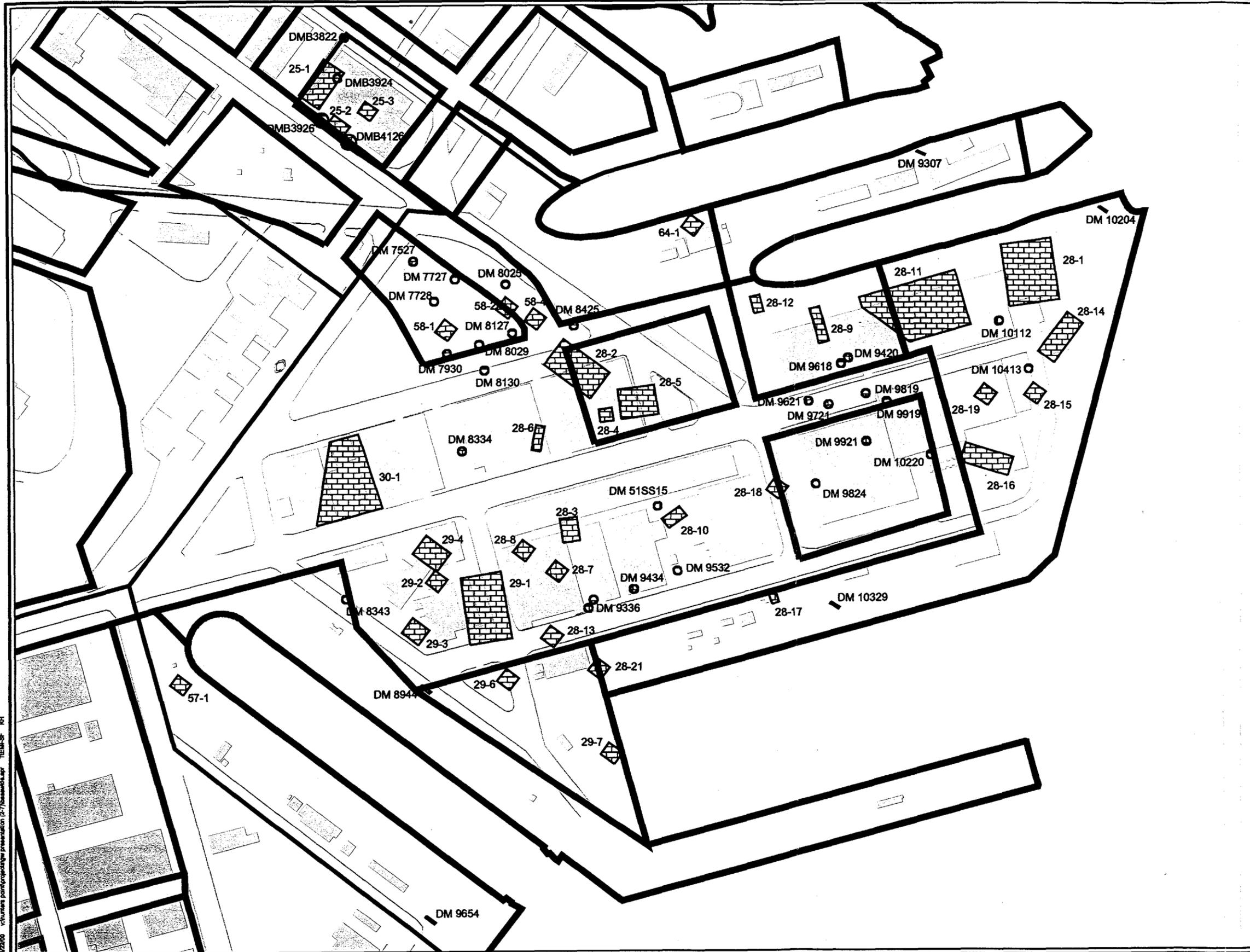
IR Site Number	Remediation or De Minimis Area	City's Land Use Plan^a	Chemicals of Concern^b	Previous Agency Recommendations^c	Proposed for Discussion^d	Navy Recommendations/Rationale
IR-57	57-1	Industrial	Metals, PAHs	EPA, DTSC, City: No further action.	No	Navy concurs with agency NFA recommendation.
	DM 8944	Industrial	PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
	DM 9654	Industrial	PAHs	EPA, DTSC, City: No further action	No	Navy concurs with agency NFA recommendation.
IR-58	58-1	Residential	PCBs	EPA, City: No further action DTSC: Action	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since contaminants were removed under EE-11A.
	58-2	Residential/ Industrial	Metals	EPA, City: No further action DTSC: Action for residential, but NFA for industrial.	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since contaminants were removed under EE-11B.
	58-4	Residential/ Industrial	Metals, Pesticides	EPA, City: No further action DTSC: Action for residential, but NFA for industrial.	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since there are no industrial risk drivers and residential risk drivers are within the acceptable risk range
	DM 7527	Residential	Metals	EPA, City: No further action DTSC: Action	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since concentrations are consistent with ambient conditions.
	DM 7727	Residential	Metals	EPA, City: No further action DTSC: Action	Yes	
	DM 7728	Residential	PAHs, Metals	EPA, City: No further action DTSC: Action	Yes	

TABLE 1 (CONTINUED)
SOIL REMEDIATION AREAS
PARCEL C, HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

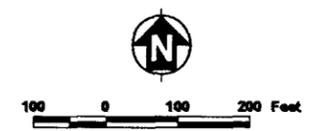
IR Site Number	Remediation or De Minimis Area	City's Land Use Plan ^a	Chemicals of Concern ^b	Previous Agency Recommendations ^c	Proposed for Discussion ^d	Navy Recommendations/Rationale
IR-58	DM 8025	Residential/ Industrial	Metals, Pesticides	EPA, City: No further action DTSC: Action for residential, but NFA for industrial.	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since there are no industrial risk drivers and residential risk drivers are either consistent with ambient concentrations or below 1998 residential PRGs
	DM 8029	Residential	Metals	EPA, City: No further action DTSC: Action	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since concentrations are consistent with ambient conditions.
	DM 8130	Residential	PAHs	EPA, City: No further action DTSC: Re-evaluate PAH concentrations	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since excavation located in proposed future street and residential scenario may not be appropriate.
	DM 8425	Industrial	Metals, PAHs	EPA, City: No further action DTSC: Action for residential, but NFA for industrial.	Yes	Navy concurs with EPA and City recommendation and wishes to discuss DTSC recommendation since excavation located in proposed future street and residential scenario may not be appropriate.
	DM 7930	Residential	Metals	EPA: No further action DTSC: Action City: Review Mn hits	No	Navy concurs with City recommendation, and will review the correlation between manganese concentrations and occurrence of chert.
	DM 8127	Residential	Metals	EPA, DTSC, City: Action	No	Navy concurs with agency recommendation.
IR-64	64-1	Industrial	Arsenic	EPA, DTSC, City: Action	No	Navy concurs with agency recommendations

TABLE 1 (CONTINUED)
SOIL REMEDIATION AREAS
PARCEL C, HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Notes:	
a	Based on "Map 1: Land Use Plan" from <i>Hunters Point Shipyard Redevelopment Plan</i> , San Francisco Redevelopment Agency, July 14, 1997.
b	For this submittal, only chemical group names (based primarily on industrial risk drivers) are specified for brevity; more detailed information on chemicals driving risk (for residential or industrial scenario, as appropriate) will be provided to BCT for further discussion
c	Recommendations are based on comments received during Parcel C RMR meetings, and comments from the draft Parcel C RMR technical memorandum
d	Parcel C soil remediation areas proposed for discussion at June 29, 2000 BCT meeting
As	Arsenic
BCT	BRAC Cleanup Team
BRAC	Base Realignment and Closure
City	City and County of San Francisco
Cr	Chromium
DM	De minimis
DTSC	California Department of Toxic Substances Control
EE	Exploratory excavation
EPA	U.S. Environmental Protection Agency, Region IX
IC	Institutional control
IR	Installation restoration
Mn	Manganese
Navy	U.S. Department of Navy
NFA	No further action
Ni	Nickel
PAH	Polynuclear aromatic hydrocarbons
PCB	Polychlorinated biphenyls
PRG	Preliminary Remediation Goal (EPA Region IX)
RMR	Risk management review



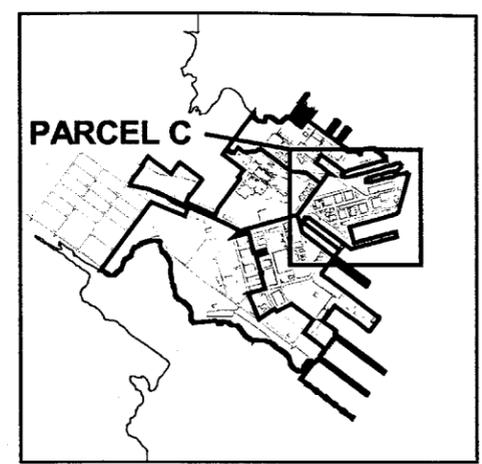
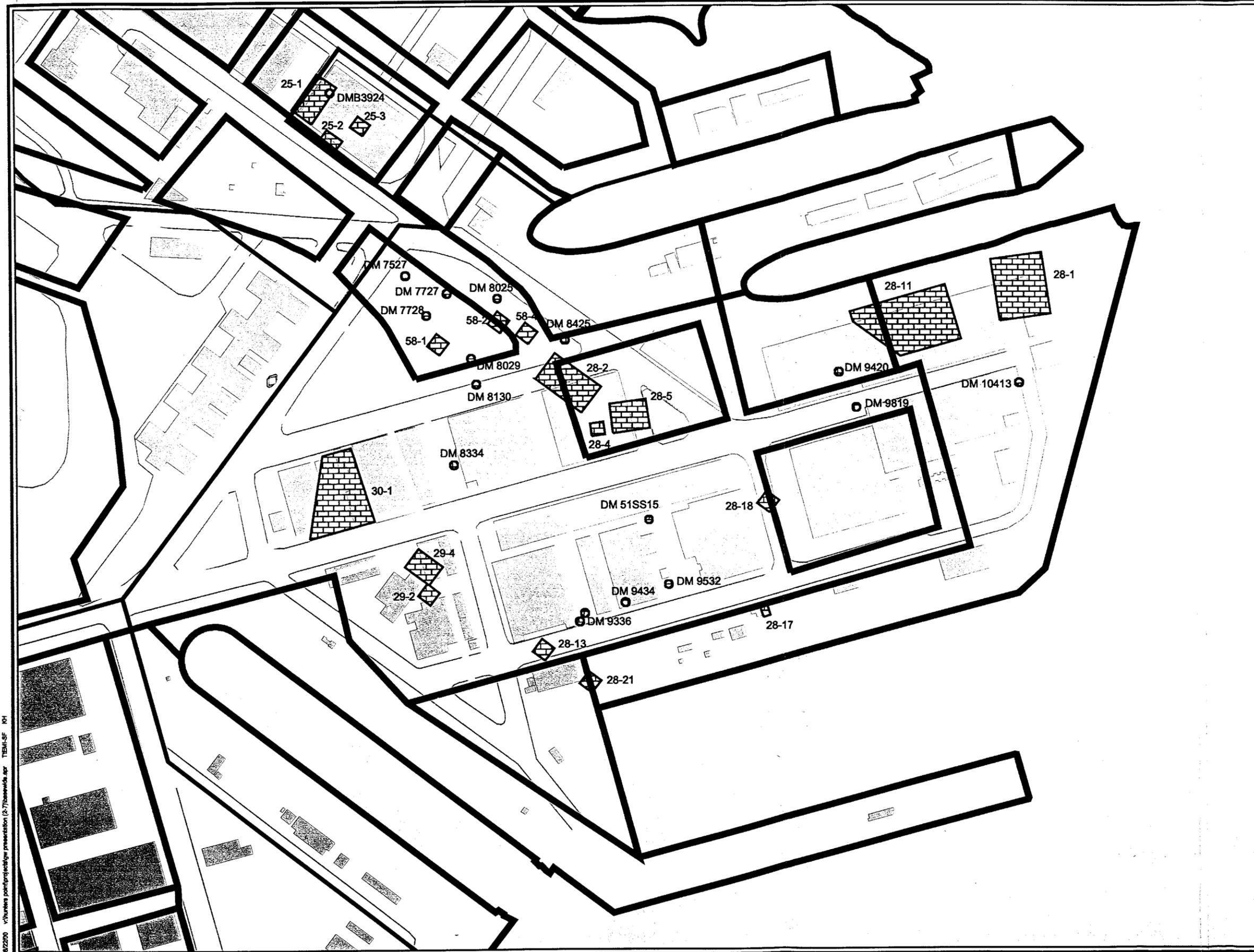
- Parcel C RMR Soil Remediation Areas Reuse Plan**
- Educational/Cultural
 - Industrial
 - Maritime
 - Mixed Use
 - Open Space
 - Research & Development
 - Residential
 - Roads
 - Buildings
 - San Francisco Bay



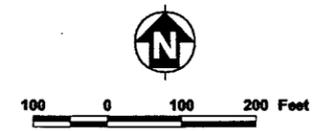
TT Tetra Tech EM Inc.

HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

FIGURE 1
PARCEL C
ALL RMR SOIL REMEDIATION AREAS



-  Parcel C RMR Soil Remediation Areas Proposed For Discussion
-  Educational/Cultural
-  Industrial
-  Maritime
-  Mixed Use
-  Open Space
-  Research & Development
-  Residential
-  Roads
-  Buildings
-  San Francisco Bay



 Tetra Tech EM Inc.

HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

FIGURE 2
PARCEL C
RMR SOIL REMEDIATION AREAS
PROPOSED FOR DISCUSSION